

## Medical Use and Chemistry of Thiurams

## **Synthesis**

CH<sub>3</sub>CH<sub>2</sub>-NH-CH<sub>2</sub>CH<sub>3</sub> + S=C=S 
$$\Longrightarrow$$
 CH<sub>2</sub>CH<sub>2</sub>-N-CH<sub>2</sub>CH<sub>3</sub>

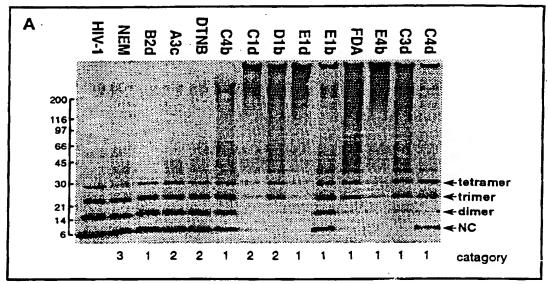
Diethyl Amine Diethylthlocarbamate

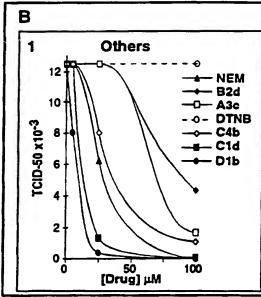
"Imuthio!"

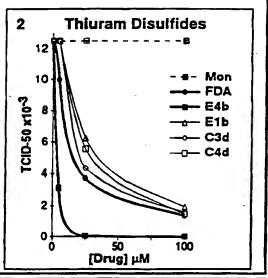
## **General Reactions**



## FIGURE 15







| ſ | С  | Compounds  | Oral Toxicity (Mouse)<br>LD-50 (g/kg) |
|---|--|--|---------------------------------------|
|   | FDA<br>E4b<br>E1b<br>C3d<br>E1b<br>C1b<br>C4b<br>A3c<br>B2 | (Tetraethylthiuram disulfide) (Dicyclopentamethylenethiuram disulfide) (Tetramethylthluram disulfide) (Tetrabutylthiuram disulfide) (Tetraisopropylthiuram disulfide (2,2'-Dithiobis(Pyridine N-Oxide) (Aldrithiol-2) (2,2' Dithiobis(benzonitrile) (Foramidine disulfide) (Benzoly Disulfide) (4-(dimethylamino)phenyl disulfide) | 1.98<br>2.87<br>2.35<br>1.35          |
| 1 |  |  |                                       |